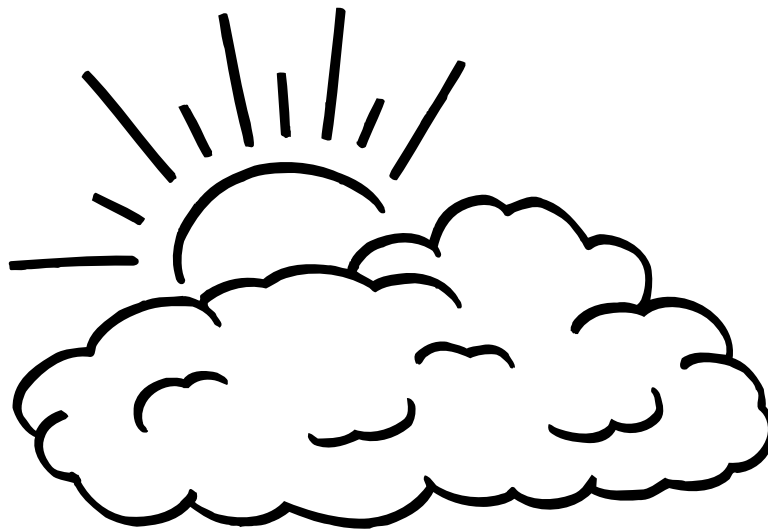


TRANSPORTATION FUND
FOR
CLEAN AIR
ANNUAL REPORT

Fiscal Year 1999/2000

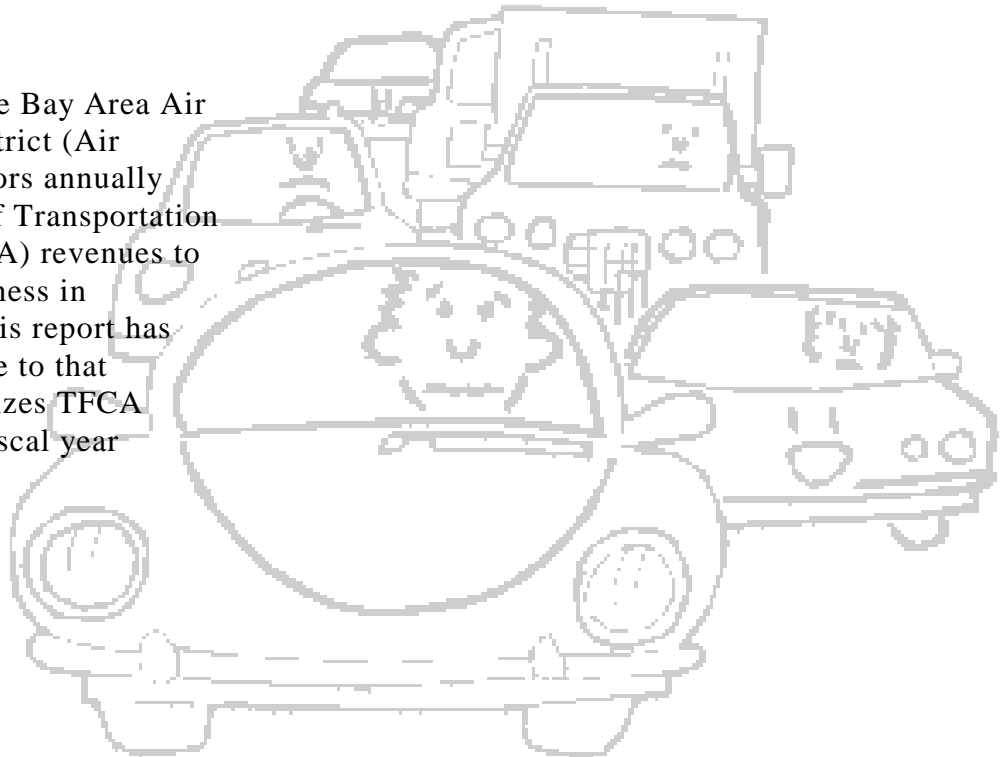


Bay Area Air Quality Management District
939 Ellis Street, San Francisco, CA 94109

Board Approved
March 15, 2000

Summary

State law requires that the Bay Area Air Quality Management District (Air District) Board of Directors annually review the expenditure of Transportation Fund for Clean Air (TFCA) revenues to determine their effectiveness in improving air quality. This report has been prepared in response to that requirement and summarizes TFCA funding allocations for fiscal year 1999/2000 (FY 99/00).



Major findings of this report are:

- ◆ TFCA funds have been allocated to eligible recipients for eligible projects consistent with the legislation which authorizes the TFCA program.
- ◆ The Air District's TFCA program received \$21.1 million in DMV receipts during calendar year 1999.
- ◆ In FY 99/00, the Air District approved TFCA funding of \$ 27.3 million for eligible projects and programs: \$18.1 million in Regional Funds (46 projects), \$9.2 million in Program Manager Funds (94 projects).
- ◆ The approved \$27.3 million in TFCA funds for FY 99/00 includes \$21.1 million in 1999 DMV receipts, \$2.1 million in interest, and \$4.1 million in TFCA funds reallocated from previously funded projects that were either canceled or completed under budget.
- ◆ The lifetime emission reductions for the FY 99/00 funded projects are 1709 tons of reactive organic gases (ROG), oxides of nitrogen (NOx), and particulate matter (PM).
- ◆ The overall cost-effectiveness of all TFCA projects funded in FY 99/00 is \$15,999 TFCA dollars per ton of emissions reduced (lifetime ROG, NOx, and PM).

The Challenge

On-road motor vehicles, including cars, trucks, and buses, are the most significant source of air pollution in the San Francisco Bay Area. Vehicle emissions contribute to unhealthful levels of ozone (summertime "smog") and particulate matter.

To protect public health, the State Legislature enacted the California Clean Air Act in 1988. In response, the Air District, in cooperation with the Metropolitan Transportation Commission and the Association of Bay Area Governments, prepared the *Bay Area Clean Air Plan (CAP)*. To reduce the emissions from motor vehicles, the *CAP* contains transportation control measures (TCMs) and mobile source measures. A TCM is defined as "any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions." Mobile source measures generally encourage the retirement of older, more polluting vehicles and the introduction of newer, less polluting motor vehicle technologies.

One Solution

To fund the implementation of TCMs and mobile source measures, the State Legislature allows air districts to impose a surcharge on motor vehicle registration fees paid within their jurisdictions. For the San Francisco Bay Area, the annual surcharge is \$4 and applies to 5 million plus vehicles registered in the region.

Revenues raised by the surcharge are allocated by the Air District through the Transportation Fund for Clean Air (TFCA). TFCA funds may only be awarded to public agencies, such as cities and counties, the Metropolitan Transportation Commission, transit districts, and public schools.

TFCA projects have many benefits:

- ♦ Reduce air pollution, including air toxics, such as benzene
- ♦ Conserve energy and help reduce global warming by reducing carbon dioxide emissions
- ♦ Reduce traffic congestion
- ♦ Reduce water pollution by reducing contaminated runoff from roadways.

State legislation restricts Bay Area TFCA funding to the following types of projects:

- ♦ Implementation of ridesharing programs
- ♦ Clean fuel school and transit bus purchases or leases
- ♦ Feeder bus or shuttle service to rail and ferry stations and to airports
- ♦ Arterial traffic management
- ♦ Rail-bus integration and regional transit information systems
- ♦ Demonstrations in congestion pricing of highways, bridges and public transit
- ♦ Low-emission vehicle demonstrations
- ♦ Smoking vehicles program
- ♦ Automobile buy-back scrappage program
- ♦ Bicycle facility improvement projects

The Process

In 1999, more than \$21 million in new funding was received from the \$4 surcharge on motor vehicle registrations. Additional funds were available from earned interest and from prior projects completed under budget, withdrawn or canceled.

Each year the Air District distributes TFCA funds through **two processes**.

► **Sixty percent** of the TFCA funds are referred to as “Regional Funds.” The Regional Funds are used to fund eligible programs that are implemented by the Air District, such as the smoking vehicle and the vehicle buy-back programs. The remainder of the Regional Funds are distributed to public agencies through a competitive process.

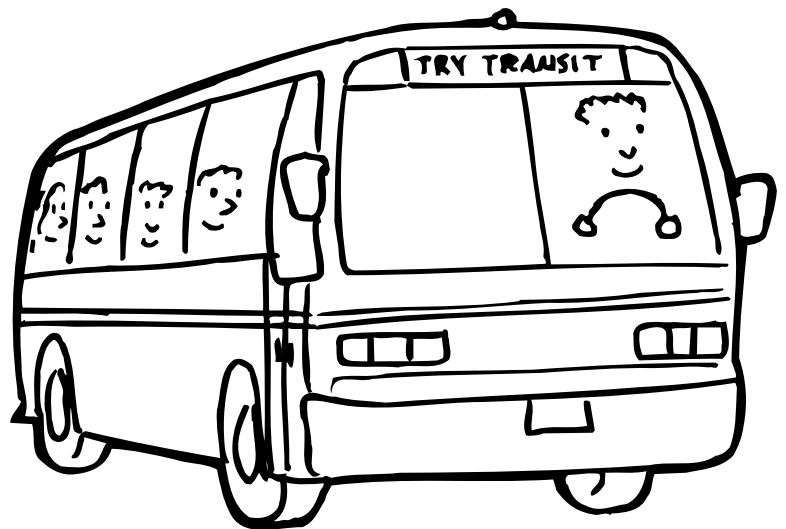
The Air District Board of Directors adopts criteria to evaluate and rank project applications for funding from the Regional Funds. Proposed projects are evaluated with respect to each criterion, and points are awarded. Projects are ranked and allocated funding based upon their total point score. The evaluation

<i>Scoring Criteria:</i>	
<i>FY 99/00 Regional Funds</i>	<i>Points</i>
TFCA Funding Effectiveness	70
Other Project Attributes	15
Clean Air Policies and Programs	10
Disadvantaged Community	5
Total	100

criteria for FY 99/00 are shown below.

Cost-effectiveness, expressed in terms of TFCA dollars per ton of reduced emissions, is the most important criterion for ranking projects.

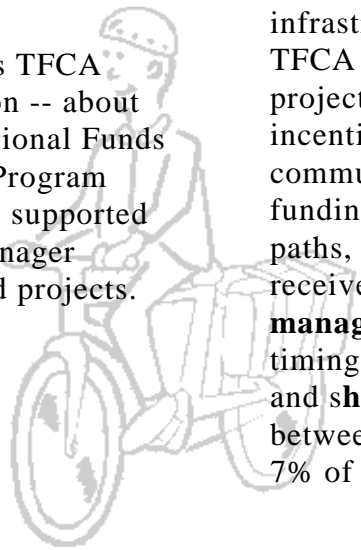
► **Forty percent** of the funds generated in each Bay Area county are returned to the county’s designated Program Manager, as mandated by the State Legislature. The 40% funds are referred to as “Program Manager Funds.” Program Managers use their own criteria to select projects for funding. Program Managers who have a competitive grant application process also use cost-effectiveness as a criterion for project selection. In some counties, all or a portion of the Program Manager TFCA funds are allocated by formula as a direct subvention to cities within the county. For these funds, the city selects an eligible project or projects to receive TFCA funding. The recommended projects are submitted to the Air District Board of Directors for approval.



Projects

In FY 99/00, the Air District's TFCA program awarded \$27.3 million -- about \$18.1 million through the Regional Funds and \$9.2 million through the Program Manager Funds. This funding supported 140 projects - 94 Program Manager projects and 46 Regional Fund projects.

Clean air vehicle projects, including school/transit buses and other electric and natural gas vehicles as well as fueling infrastructure received 38% of the total TFCA funds awarded. **Ridesharing** projects, which provide services and incentives to encourage people to use a commute alternative received 19% of the funding. **Bicycle facilities**, including bike paths, lanes, routes and lockers/racks, received 13% of the total funds. **Arterial management projects**, including signal timing to smooth traffic flow received 8% and **shuttle projects**, connecting people between home, transit, and work received 7% of the total available funding.



Category	# of FY 99/00 Projects	FY 99/00 TFCA \$	% of 99/00 TFCA \$	Emission Reductions, (tons) ⁽²⁾	% of Emission Reductions
Administration	10 ⁽¹⁾	\$1,332,611	5%	na	na
Smoking Vehicle	1	\$684,467	3%	133	8%
Vehicle Buy Back	1	\$1,845,379	7%	238	14%
Ridesharing	34	\$5,233,448	19%	331	19%
Arterial Management	12	\$2,344,561	8%	96	6%
Bicycle Facilities	36	\$3,456,095	13%	134	8%
Shuttles	13	\$1,919,180	7%	99	6%
Vehicle Incentive Program (natural gas and electric light duty vehicles)	1	\$1,398,630	5%	14	1%
Transit Buses	6	\$2,412,125	8%	102	6%
School Buses	8	\$2,141,200	8%	62	4%
Natural Gas Vehicles	11	\$4,047,686	15%	500	29%
Infrastructure for CNG	2	\$222,634	1%	na	na
Infrastructure for EV	3	\$303,543	1%	na	na
T O T A L	140	\$27,341,559	100%	1709	100%

na= not applicable

(1)The Air District and each of the nine counties have an "Administration" component of their TFCA programs. These are shown as "projects" in this table in order to account for the total TFCA allocations.

(2) Regional Fund Projects

Results

►Emission Reductions

For every project funded, the Air District estimates the emissions reduced over the life of the project. Within each project type, the potential of projects to reduce motor vehicle emissions varies widely due to such factors as the scale of the project, geographic location and other factors. For example, shuttle projects are most effective when shuttle ridership is high and the riders were previously driving for their commute trip; emission reductions for clean air vehicle projects are highly dependent upon vehicle use, i.e. annual miles of travel, etc.

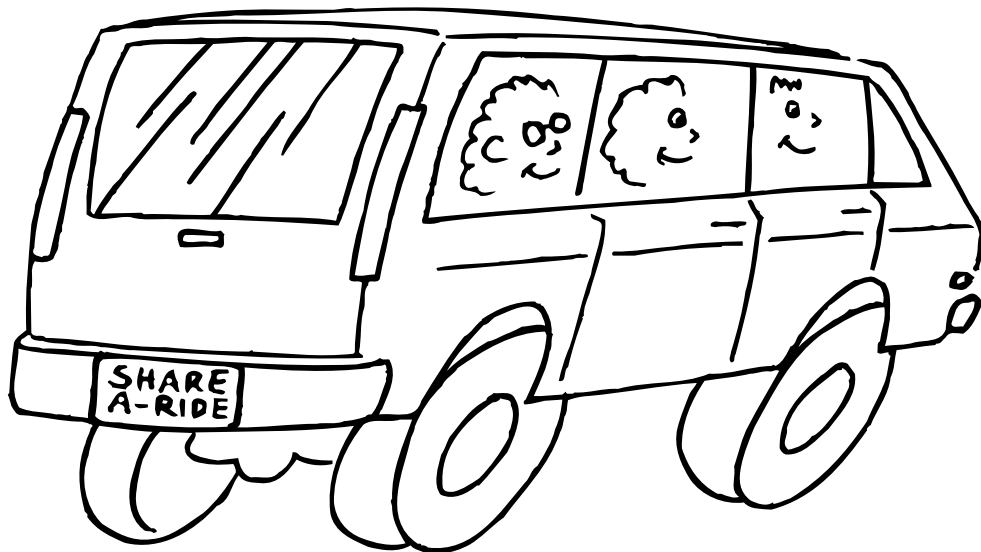
The total lifetime emission reductions expected from the implementation of projects receiving TFCA funding in FY 99/00 is 1709 tons (ozone precursors and particulate matter).

► Effectiveness

One way to measure the effectiveness of the TFCA program is to divide the TFCA funding allocated to projects by their lifetime emission reductions (ROG, NO_x, and PM, combined). The result is TFCA dollars per ton of reduced emissions. The *overall* TFCA dollars per ton for FY 99/00 allocations is \$15,999 per ton. This is almost a \$1,000 improvement over the FY 98/99 TFCA allocations and represents a very cost-effective use of the TFCA funds.

► Projects

The appendices list all the projects that were allocated TFCA funding in FY 99/00.



APPENDIX A: FY 99/00 TFCA Funded Air District* Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
99R00	BAAQMD	Administration	\$931,149
99R01	BAAQMD	Smoking Vehicle Program	\$684,467
99R02*	BAAQMD	Vehicle Buy Back Program	\$1,845,379
99R03	BAAQMD	BayCAP/Spare The Air	\$662,935
99R04*	BAAQMD	VIP Incentives	\$1,334,630
99R05*	BAAQMD	Electric Vehicle Charging Sites	\$211,543
		T O T A L	\$5,670,103

* Greater than 95% of the funds for project 99R02 are expended by contractors, and >95% of the funds for projects 99R04 and 99R05 are expended by project sponsors to implement these projects.

APPENDIX B: FY 99/00 TFCA Regional Fund Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
99R46	AC Transit	Feeder Bus Service - Ardenwood/Gateway/BART	\$165,000
99R47	AC Transit	Feeder Bus Service - Warm Springs/ACE	\$129,500
99R52	Alameda County Congestion Management Agency	Arterial Management - San Pablo Smart Corridor Traffic Detection Devices	\$500,000
99R54	BART	Bicycle Rack Replacement/Expansion (2,288 bicycle capacity)	\$148,168
99R35	Bennett Valley Union School District	School Bus Purchase - 3 CNG	\$295,200
99R72	City and County of San Francisco	Natural Gas Vehicle Demonstration - 14 HDV Class 8 Trucks	\$980,000
99R18	City of Concord	Arterial Management - Kirker Pass/Ygnacio Valley Rd. (11 signals)	\$150,000
99R19	City of Concord	Class 1 Bicycle Path (0.3 mi.) and Traffic Signal	\$150,000
99R21	City of Cupertino	Class 2 Bicycle Lanes (1.1 mi.) - Wolfe Rd.	\$100,000
99R22	City of Cupertino	Class 2 Bicycle Lanes (1.1 mi.) - Bollinger Rd.	\$140,000
99R23	City of Cupertino	Arterial Management - Retime 34 Traffic Signals - DeAnza and Stevens Creek Blvds., Wolfe Rd.	\$120,000
99R65	City of Dublin	Class 1 Bicycle Path - Alamo Canal (0.8 mi.)	\$154,080
99R07	City of Fremont	Natural Gas Vehicle Demonstration - 2 Street Sweepers	\$50,000
99R24	City of Napa	Natural Gas Vehicle Demonstration - 6 HDV Recycle Trucks	\$390,000
99R25	City of Napa	Natural Gas Vehicle Demonstration - 1 HDV Dump Truck	\$25,000
99R66	City of Oakland	Bicycle Racks – CityRacks Phase 2 (400 bicycle capacity)	\$24,700
99R67	City of Oakland	Class 2 Bicycle Lanes - Bancroft Ave. (4.6 mi.)	\$160,000
99R55	City of San Jose	Natural Gas Vehicle Demonstration - 14 HDV Refuse Collection Trucks	\$1,000,000
99R16	City of Santa Rosa	Natural Gas Vehicle Demonstration - 5 HDV	\$74,686
99R64	County of Contra Costa - Comm. Dev. Dept.	Ridesharing Vanpool Subsidy - Contra Costa Centre	\$38,850
99R50	County of Marin	Natural Gas Vehicle Demonstration - 2 HDV Dump Trucks	\$80,000
99R11	County of Santa Clara - Roads and Airports	Arterial Management - Lawrence Expressway Adaptive Traffic Signal System	\$215,000

APPENDIX B: FY 99/00 TFCA Regional Fund Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
99R41	County of Sonoma	Class 2 Bicycle Lanes - West Third St. (0.23 mi.)	\$80,000
99R45	Metropolitan Transportation Commission	Regional Rideshare Program (RIDES)	\$1,000,000
99R12	Mt. Diablo Unified School District	School Bus Purchase - 7 CNG	\$756,000
99R49	Napa Valley Unified School District	School Bus Purchase - 1 CNG	\$65,000
99R30	Peninsula Corridor Joint Powers Board	Caltrain Shuttle Bus Service	\$731,107
99R34	Redwood City School District	School Bus Purchase - 1 CNG	\$125,000
99R15	San Francisco MUNI	Transit Bus Purchase - 2 Diesel Electric Hybrid	\$506,000
99R10	San Francisco Dept. of Parking and Traffic	Class 2 Bicycle Lanes on eleven streets (total 5.1 mi.)	\$250,800
99R29	San Francisco International Airport	Natural Gas Vehicle Demonstration - 22 Hotel/Parking Shuttle Buses	\$810,000
99R58	San Ramon Valley Unified School District	School Bus Purchase - 2 CNG	\$210,000
99R59	San Ramon Valley Unified School District	Natural Gas Vehicle Demonstration - 2 HDV	\$110,000
99R06	Santa Clara County VTA	Shuttles to ACE Trains	\$239,089
99R13	Santa Clara Unified School District	School Bus Purchase - 9 CNG	\$500,000
99R31	Santa Clara Valley Transportation Authority	Vanpool Incentives - Smartpool II	\$66,765
99R33	Sequoia Union High School District	School Bus Purchase - 2 CNG	\$160,000
99R42	Sonoma County Transit	Transit Bus Purchase - 4 CNG	\$775,000
99R43	Sonoma County Transit	Natural Gas Vehicle Demonstration - 8 CNG Refuse Trucks	\$440,000
99R38	Union City Transit	Transit Bus Purchase - 2 CNG	\$560,000
		T O T A L	\$12,474,945

APPENDIX C: FY 99/00 TFCA Program Manager Fund Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
99ALA00	Alameda County Congestion Management Agency	Administration	\$95,761
99ALA01	Alameda County Congestion Management Agency	Arterial Management - I-880 Smart Corridor	\$182,000
99CC21	BART	Bicycle Parking - Walnut Creek/Orinda Stations (20 lockers, 96 racks)	\$79,500
99SF03	City and County of San Francisco	Hall of Justice Shuttle	\$51,000
99SF04	City and County of San Francisco	Natural Gas Vehicle Demonstration - 18 LDV	\$88,000
99SF05	City and County of San Francisco	Bicycles for Gardeners (11 bicycles, 4 trailers)	\$11,000
99SF06	City and County of San Francisco	Police Bicycles (80 bicycles)	\$66,000
99SF08	City and County of San Francisco	Electric Vehicle Demonstration - 4 EV	\$32,000
99SOL01	City of Benicia	Feeder Bus Service - Pleasant Hill BART	\$29,600
99SM04	City of Burlingame	Shuttle - Downtown Free Bee	\$78,523
99SC01	City of Cupertino	Arterial Management - DeAnza/Stevens Creek/Wolfe Rd	\$120,000
99SC02	City of Cupertino	Arterial Management - Homestead Rd.	\$117,359
99SC03	City of Cupertino	Class 2 Bicycle Lane - Miller Ave. (0.9 mi.)	\$80,000
99SC04	City of Cupertino	Class 2 Bicycle Lanes - Tantau Ave. (1.8 mi.)	\$280,000
99SC05	City of Cupertino	Class 2 Bicycle Lanes - Stevens Creek Blvd. (1.1 mi.)	\$40,000
99SC06	City of Gilroy	Electric Police Bicycles (4 bicycles)	\$11,951
99SM02	City of Menlo Park	Shuttle - Marguerite	\$43,678
99SM03	City of Menlo Park	Shuttle - Mid-Day	\$30,500
99NAP01	City of Napa	Class 1 Bicycle Path - Solano to California (0.3 mi.)	\$74,013
99NAP02	City of Napa	Feeder Bus Service - Vallejo Ferry	\$50,200
99ALA05	City of Oakland	Class 2 Bicycle Lane - Telegraph Ave. (2.5 mi.)	\$25,000
99ALA06	City of Oakland	Class 2 Bicycle Lane - 3rd St. (1.3 mi.)	\$50,000
99CC20	City of Orinda	Class 2 Bicycle Lanes - 3 segments in Moraga Way corridor (0.2 mi.)	\$50,000
99SC07	City of Palo Alto	Class 2 Bicycle Lanes - Arastradero Rd. (0.35 mi.)	\$300,000
99SON01	City of Petaluma	Class 2 Bicycle Lane - Bodega Ave. (0.5 mi.)	\$92,961
99CC08	City of Pleasant Hill/TRANSPAC	Ridesharing - Carpool Incentive Program	\$97,000
99CC09	City of Pleasant Hill/TRANSPAC	Ridesharing - School Pool Program	\$65,000
99CC10	City of Pleasant Hill/TRANSPAC	Ridesharing - Transit Incentive Program	\$104,000
99CC11	City of Pleasant Hill/TRANSPAC	Ridesharing - College Trip Reduction Program	\$190,000

APPENDIX C: FY 99/00 TFCA Program Manager Fund Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
99SON02	City of Rohnert Park	Bicycle Path Undercrossing	\$40,000
99SC08	City of San Jose	Class 1 Bicycle Path - Coyote Creek (3 undercrossings)	\$195,888
99SC09	City of San Jose	City-Wide Bicycle Parking (160 spaces)	\$42,000
99SM05	City of San Mateo	Shuttle - Transit Center	\$39,150
99CC13	City of San Ramon	Ridesharing - Vanpool Incentive Program	\$40,000
99CC14	City of San Ramon	Natural Gas Vehicle Fueling Stations	\$33,000
99CC15	City of San Ramon	Arterial Management - Bollinger Canyon	\$133,400
99SC10	City of Santa Clara	Class 1 Bicycle Path - San Tomas Aquino Creek Bicycle Path (at grade crossing at Agnews Rd.)	\$153,000
99SON04	City of Santa Rosa	Student Transit Pass Subsidy	\$65,000
99SON05	City of Santa Rosa	Ridesharing - Employer Trip Reduction	\$107,502
99SON06	City of Santa Rosa	Class 1 Bicycle Path - Downtown (0.5 mi.)	\$56,757
99SC11	City of Saratoga	Altrans Trip Reduction Program	\$329,390
99SON07	City of Sebastopol	Class 1 Bicycle Path - Connector (0.2 mi.)	\$20,890
99SC12	City of Sunnyvale	Class 2 Bicycle Lanes - Caribbean Drive (1.2 mi.)	\$93,960
99SC13	City of Sunnyvale	Class 2 Bicycle Lanes - Arques Ave. (1.7 mi.)	\$95,490
99SC14	City of Sunnyvale	Arterial Management - Central Sunnyvale	\$400,000
99SOL08	City of Vallejo	Police Bicycles (6 bicycles)	\$8,500
99SOL09	City of Vallejo	Solano Bikeway	\$23,893
99SOL10	City of Vallejo	Electric Vehicle Charger	\$62,000
99SOL11	City of Vallejo	Shuttle - Mare Island	\$20,000
99CC00	Contra Costa County Transportation Authority	Administration	\$63,137
99CC06	County of Contra Costa - DPW	Class 2/3 Bikeway - I-80 (8 mi.)	\$99,000
99CC07	County of Contra Costa - DPW	Class 2 Bicycle Lanes/Class 3 Bicycle Route - Blum Rd. (3.2 mi.)	\$50,000
99SC15	County of Santa Clara - Dept. of Roads and Airports	Arterial Management - Streetwise Traffic Operations System	\$350,000
99SOL05	County of Solano	Class 1 Bicycle Path - Green Valley Rd. (0.6 mi.)	\$42,000
99MAR02	Lagunitas School District	GO GERONIMO Ridesharing Program	\$8,100
99CC16	Lamorinda School Bus Program	School Bus Operations Subsidy	\$30,000
99MAR00	Marin County Congestion Management Agency	Administration	\$18,256
99MAR03	Marin County Congestion Management Agency	Bicycle Lockers (10 lockers)	\$9,000

APPENDIX C: FY 99/00 TFCA Program Manager Fund Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
99MAR04	Marin County Congestion Management Agency	Natural Gas Fueling Station	\$189,634
99MAR05	Marin County Congestion Management Agency	Electric Vehicle Demonstration - 4 LDV	\$32,000
99MAR06	Marin County Congestion Management Agency	Class 2 Bicycle Path - Auburn St. (0.2 mi.)	\$72,100
99MAR07	Marin County Congestion Management Agency	Class 2 Bicycle Lanes - Ranchitos Rd. (0.4 mi.)	\$68,895
99ALA03	Metropolitan Transportation Commission	Regional Rideshare Program	\$1,144,000
99NAP03	Metropolitan Transportation Commission	Regional Rideshare Program	\$42,280
99SM06	Metropolitan Transportation Commission	Regional Rideshare Program	\$265,000
99SF02	MUNI	Natural Gas Transit Buses	\$365,000
99NAP00	Napa County Transportation Planning Agency	Administration	\$8,510
99SM07	Peninsula Congestion Relief Alliance Program	Ridesharing - Employer Trip Reduction	\$294,595
99SF00	San Francisco County Transportation Authority	Administration	\$36,000
99SF07	San Francisco Department of Parking and Traffic	Class 3 Bicycle Routes Pavement Stencils	\$110,000
99SM00	San Mateo City/County Association of Governments	Administration	\$35,000
99SM01	San Mateo County Transit District	Shuttle - Sam Trans (8 routes)	\$311,833
99SC00	Santa Clara Valley Transportation Authority	Administration	\$101,406
99SOL02	Solano Community College District	Electric Police Bicycles (9 bicycles)	\$12,216
99SOL03	Solano Commuter Information	Enhanced Vanpool Services	\$40,000
99SOL04	Solano Commuter Information	Transit Trip Planning Services	\$35,000
99SOL00	Solano Transportation Authority	Administration	\$15,273
99SOL06	Solano Transportation Authority	Citylink Route 30 Clean Air Transit Bus	\$5,000
99SOL07	Solano Transportation Authority	Electric Vehicle Infrastructure Program	\$30,000
99SON03	Sonoma County Transit	Student Transit Pass Subsidy	\$35,690
99SON08	Sonoma County Transit	Park and Ride Facility - Downtown Windsor	\$115,139
99SON09	Sonoma County Transit	Transit Bus Replacements	\$201,125
99SON00	Sonoma County Transportation Authority	Administration	\$28,119
99CC17	Town of Danville	Bicycle Signal Crossing - Iron Horse Trail	\$4,000

APPENDIX C: FY 99/00 TFCA Program Manager Fund Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
99CC18	Town of Danville	Arterial Management - Camino Tassajara	\$42,000
99CC19	Town of Danville	Arterial Management - San Ramon Valley Blvd.	\$14,802
99MAR01	Town of Fairfax	Park and Ride Lot - Olema Rd./Sir Francis Drake	\$80,000
99CC12	Town of Moraga	Moraga Park and Ride Lot	\$20,000
99SF01	University of California San Francisco	Police Bicycles (4 bicycles)	\$11,000
99CC01	WCCTAC	Ridesharing - Employer Trip Reduction	\$20,509
99CC02	WCCTAC	Ridesharing - Train Incentives	\$17,009
99CC03	WCCTAC	Ridesharing - Guaranteed Ride Home	\$69,009
99CC04	WCCTAC	Ridesharing - Transit Commute Store	\$40,008
99CC05	WCCTAC	Ridesharing - Reconfigure/Reconstruct Richmond Parkway Transit Center	\$120,000
		T O T A L	\$9,196,511